



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/644,797

08/24/2000

Hisashi Amafuji

D-990

2917

32628

7590

03/22/2011

KANESAKA BERNER AND PARTNERS LLP
1700 DIAGONAL RD
SUITE 310
ALEXANDRIA, VA 22314-2848

EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

03/22/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|----------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/644,797 | Applicant(s) AMAFUJI ET AL. | |
| | Examiner SRILAKSHMI K. KUMAR | Art Unit 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2629

DETAILED ACTION

The following office action is in response to the request for revival of abandonment granted on 10/20/2010. The after final amendment filed on 2/19/2003 have been entered. The finality of the previous office action is withdrawn. Claims 1-4, 6-8 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, applicant claims “and including a computer side output transmission circuit connected to the display device through the at least one interface so that the signals at the computer passing through the bus line are transmitted to the display device by wireless as they are”. Examiner is unclear if the applicant is claiming that the signals are transmitted wirelessly or wired. Applicant claims where the signals pass through a bus line but then also claims that they are wireless. Clarification is requested.

Further in Claim 1, it seems that applicant has a missing term in the limitation, "...the signals at the computer passing through the bus line are transmitted to the display device by wireless as they are..." The limitation of "are transmitted to the display device by wireless as they are" is unclear. Appropriate correction is required.

Also in claim 1, applicant claims “and are processed at a user side to be displayed at the display device through the at least one interface, said signals being transferred to the body side

Art Unit: 2629

output transmission circuit without processing and being processed to obtain each kind of signals at the user side.” This limitation seems to repeat itself. Applicant claims initially that the signals are processed at a user side, and then repeats this same limitation saying that the signals are transferred without processing to the body side output transmission circuit and then repeats the signals are processed at the user side. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Natoli et al (US 6,388,657).

As to independent claim 1, Natoli et al teaches a body mounting display system (Fig. 1), comprising: a display device to be worn by a user (Fig. 1 VR LCD Headset) and having at least one interface (Fig. 1, VR gloves), computer (Fig. 1, second processor which is the computer as

Art Unit: 2629

shown in Fig. 2) situated away from the display device and having a bus line for outputting signals corresponding to at least display data (Fig. 2 teaches where the computer is situated away, in Fig. 4, where signals are sent), said computer transmitting a plurality of different kinds of signals (col. 7, line 40-col. 8, line 15); and a radio transmission device disposed between the display device and the computer (col. 7, line 40-col. 8, line 15, 40-col. 9, line 35), and including a computer side output transmission circuit connected to the display device through the at least one interface so that the signals at the computer passing through the bus line are transmitted to the display device by wireless as they are (col. 6, lines 1-10 teach wireless transmissions, col. 7, line 40-col. 9, line 35), and are processed at a user side to be displayed at the display device through the at least one interface, said signals being transferred to the body side output transmission circuit without processing and being processed to obtain each kind of signals at the user side (col. 2, lines 38-49 and col. 7, lines 40-col. 9, line 35).

As to independent claim 4, Natoli et al teaches a body mounting display system (Fig. 1), comprising a display device to be worn by the user (Fig. 1, VR LCD Headset); an image output interface connected to the display device (col. 2, lines 38-49 and col. 7, lines 40-col. 9, line 35), a computer located away from the display device (Fig. 2, where the computer is situated away) for outputting signal corresponding to display data for the display device and having a bus line (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said computer transmitting a plurality of different signals (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), and a signal transmission device disposed between the display device and the computer, and including a computer side output transmission circuit connected to the computer through the bus line (Fig. 1, col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35) and a

Art Unit: 2629

body side output transmission circuit connected to the display device through the image output interface, said computer side output transmission circuit having a first buffer memory to which data corresponding to the signal through the bus line is written by the computer (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), a first reading device for reading the data stored in the first buffer memory and converting the data to communication signals (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said body side output transmission circuit including a first receiving device for receiving the communication signals sent from the first sending device as they are and a first restoring device for restoring the received communication signals to signals corresponding to the signals outputted through the bus line (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said signals of the computer being transferred to the body side output transmission circuit without processing and being processed to obtain each kind of signals at the user side (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said image output interface processing and producing signals at the user side for actuating the display device based on the communication signals (col. 6, line 1-63).

As to dependent claims 2 and 3, see rejection of claim 4, above.

Allowable Subject Matter

5. Claims 6-8 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2629

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Srilakshmi K Kumar/
Primary Examiner
Art Unit 2629

March 17, 2011